



Derek Feichtinger::

CMS VO Contact Report for T2_CH_CSCS

WLCG SwissOps Meeting 20. May 2021



Outline

1 CMS Overview

2 Trouble Tickets

3 CMS dcache Storage access rules

4 Monitoring Status Graphs

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1 CMS Overview

- 2 Trouble Tickets
- 3 CMS dcache Storage access rules

4 Monitoring Status Graphs





- SAM status over last month looked ok... until today
 - major impact since the end of the downtime
- CMS monitoring for the period before today looks fine
- storage cleaning campaing: mostly finished. Some deletions of data still to be done
- cms02.lcg.cscs.ch: I decommissioned the machine and moved the xroot services to cms03.

- move to r/w xrootd config for CMS: need a minor config change by CSCS to be able and move service from ATLAS port 1094 to CMS dedicated port 1096.
- I am prototyping the new storage access permissions we need to implement for CMS at the Tier-3 test systems.



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Storage Cleaning Campaign - mostly done

- automatic cleaning (tmpwatch) installed as systemd timer on cms03 for selected CMS directories
- Storage cleaning campaing
 - Developed workflow to correlate information from
 - CSCS dcache: user directories
 - CERN phonebook: get email addresses based on user directory names
 - PSI CMS Tier-3 IdM: identify Swiss users (also historic)
 - developed script that will do automatic mail sending, text containing users specific volume usage, and adapted for their status in respect to the Swiss collaboration
 - ☑ launch via CERN Ixplus since generated mail is only routed within same domain (security)
- group space still to be tackled



Xroot access and cms02 decommissioning

- Moved CMS federation host xrootd installation and squid to cms03 and decommissioned cms02.
- Need to have exported path on storage01:1096 door reconfigured in accordance with what is done on the service on port 1094. As soon as this is done, will enter the new service into our CMS site configuration.



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- 2 Trouble Tickets



GGUS Tickets and requests

Link to open GGUS tickets for T2_CH_CSCS

| Ticket-ID | Status | Priority | Date | Subject |
|-----------|----------|----------|------------|-----------------------------|
| 152070 | assigned | urgent | 2021-05-20 | SAM failures after downtime |
| 152033 | in progr | urgent | 2021-05-17 | xroot cms02 decommiss. |
| 151265 | on hold | less urg | 2021-04-08 | WebDAV transfers |



Monitoring Status Graphs



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CMS dcache Storage access rules

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Only 2 dcache auth rules mapping to local storage entities

| DN | Role/Group | account | group | uid | gid |
|----|-------------------|---------|-------|------|------|
| * | /cms/Role=cmsprod | cmsprd | cms | 4199 | 4001 |
| * | * | cms001 | cms | 4100 | 4001 |

CMS dcache Storage access rules

All CMS file space writable by CMS group

drwxrwxr-x 3 4101 4001 512 Mar 30 17:52 /pnfs/.../trivcat



The problem

Only 2 dcache auth rules mapping to local storage entities

| DN | Role/Group | account | group | uid | gid |
|----|-------------------|---------|-------|------|------|
| * | /cms/Role=cmsprod | cmsprd | cms | 4199 | 4001 |
| * | * | cms001 | cms | 4100 | 4001 |

CMS dcache Storage access rules

All CMS file space writable by CMS group drwxrwxr-x 3 4101 4001 512 Mar 30 17:52 /pnfs/.../trivcat

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- Each CMS user could wipe the whole storage clean using a recursive remove operation!
- Scripting errors lead to frequent wrong files in all kinds of paths



Opt 1: 3 shared accounts

- cmsops,cms: all central ops and our CMS local managers
- cmsuser,cms: all normal users
- cmschusr,cms: all Swiss users

| drwxr-xr-x | cmsops:cms | /trivcat |
|-------------|-----------------|--------------------------------|
| drwxr-xr-x | cmsops:cms | /trivcat/store/user |
| drwxr-xr-x | cmschusr:cms | /trivcat/store/user/swissuserA |
| drwxr-xr-x | cmschusr:cms | /trivcat/store/user/swissuserB |
| drwxrwxr-xt | cmsops:cms | /trivcat/store/temp/user |
| drwxr-xr-x | cmsops:cms | /trivcat/store/group |
| drwxrwxr-x | chgroup:chgroup | /trivcat/store/group/groupA |

Features

- Only a cmsops user can create a /store/user directory
- All CMS users can create dirs in /store/temp/user
- all users mapped to same account can delete each other's data
- all Swiss users can write to all group spaces and delete them

Requires

- maintaining a list of Swiss user certs
- Swiss users must be added to chgroup
- creation of user directories in /trivcat/store/user



Opt 2: 2 shared + Swiss user accounts

- cmsops,cms: all central ops and our CMS local managers
- cmsuser,cms: all normal users
- cms_u_A,cms_u_B: an account for each swiss users (non-login)

| drwxr-xr-x drwxr-xr-x drwxr-xr-x drwxr-xr-x drwxrwxr-xt drwxr-xr-x drwxrwxr-x | cmsops:cms cmsops:cms cms_u_a:cms cms_u_b:cms cmsops:cms cmsops:cms chgroup:chgroup | /trivcat/trivcat/store/user/trivcat/store/user/swissuserA/trivcat/store/user/swissuserB/trivcat/store/temp/user/trivcat/store/group/trivcat/store/group/groupA |
|---|---|--|
| diwxiwxi-x | crigroup.crigroup | /trivcat/store/group/groupA |

Features

- Swiss user dirs only writable by each Swiss user
- group spaces only writable by members of these Swiss groups
- Only a cmsops user can create a /store/user directory
- All CMS users can create dirs in /store/temp/user and non-Swiss users can delete each other's data

Requires

- creation of user/group accounts and life cycling them
- maintaining a list of Swiss user cert to account mappings
- maintaining account to group mappings



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CMS site status based on SAM for CSCS

It was looking so good on Tuesday....

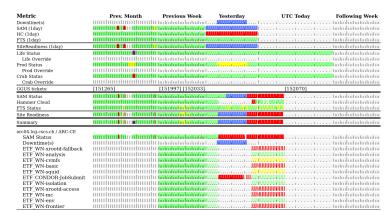
T2 CH CSCS Site Status Detail (Tu, 2021-May-18 14:54 GMT)

| Metric | Prev. Month | Previous Week | Yesterday | UTC Today | Following Week |
|----------------------------|---|---|--|---|--------------------------------|
| Downtime(s) | - donorborosborosboro | H bodododododododo | | | Imbotobolodorio |
| SAM (1day) | diamentament 🕯 🗠 🗆 attama | Oli footostootostootostoot | | | Induction behavior |
| HC (1day) | dominionaliaani | Of technique technique | | | Induction behalischer |
| FTS (1day) | dominionalmentem | Office to dealers and advantage to | | | Inductorio habataria |
| SiteReadiness (1day) | - drawardana da i alama | Al <mark>tod</mark> ardadadadadada | | 11111111111111111111111 | հանանանահանանա |
| Life Status | | | | | |
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| Crab Override | - dominimontono de la constanta | H Hadiadadadadadada | | | Imbodialialialialia |
| GGUS tickets: | [151265] | [151997] | [152033] | | |
| SAM Status | dominiano <mark>l</mark> birrationo | (la | | | hababababababa |
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| FTS Status | dominional constant | Of toldresteeteeteeteetee | U JUULA JULIA VALUULUAUUN AU | UNIVERSITY OF THE STREET | Imbuliabaliabalia |
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| Summary | | Of the trade decision and | | UU | 1 <mark>66</mark> hahahahahaha |
| arc04.lcq.cscs.ch / ARC-CE | | | | | |
| SAM Status | damarikaan liba calaan | | | CONTRACTOR | Inductional about of |
| Downtime(s) | - danadamatamatam | Albertaria da | | | I 🌃 broton broton broton |
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| ETF WN-xrootd-access | - danadamatamatam | ti in <mark>troductorio de l</mark> | OLOLOVO OLOVO OLOVO OLOVO OLOVO | DUDUNUL BUNCUL | Indududududududu |
| ETF WN-basic | - danadamatamatam | II fortest ortest ortest ort | OLOUUVUUUUVUUUVUUUVUUUU | DUDUNUL BUNCUL | Imbuliabaliabatia |
| ETF CONDOR-JobSubmit | - damadamadamadam | I fortested a testados | OUTUNIO DE LA PROPERCIONA DE LA PROPERCION DE LA PORTECION DE LA PROPERCION DEL PROPERCION DE LA PORTECION DEL PROPERCION DE LA PROPERCION DE LA PORTECION DE LA PORTECION DEL PROPERCION DE LA PORTECION DE LA PORTECION DE LA POR | DUDUNUL JUNEUL JUL | Inductional about of |



CMS site status based on SAM for CSCS

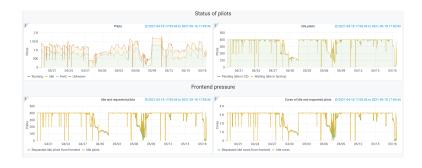
Today



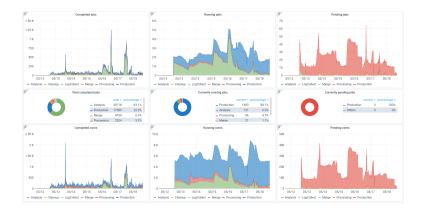
CSCS queue plots 7 days



Factories



CMS job types



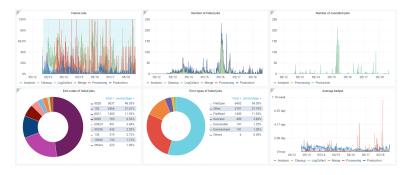
CMS dcache Storage access rules

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CMS job efficiency and memory



CMS job failures

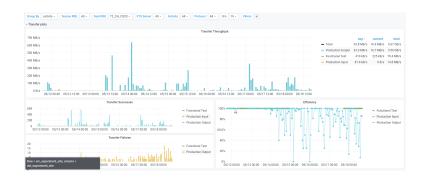


| Error | Description |
|-------|-------------------------------------|
| 8028 | FileOpenError with fallback |
| 152 | CPU limit exceeded |
| 8021 | FileReadError (May be a site error) |

FTS transfers outgoing



FTS transfers incoming



CMS dcache Storage access rules

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FTS transfers incoming (2)

